

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method for adjusting the central nervous system affecting vagal nerve stimulation (VNS) signal induced by a stimulus generator implanted in a patient in need of vagal nerve stimulation comprising the steps of

a) monitoring at least one parameter selected from respiratory parameters and physiological acid-base parameters which correlate to the VNS intensity, and

b) regulating the stimulation intensity in response to said at least one parameter.

2. (original) A method as claimed in claim 1 wherein said at least one respiratory parameter is selected from a group consisting of end-tidal carbon dioxide (EtCO<sub>2</sub>), respiratory rate (RR), respiratory frequency (RF), respiration amplitude (RA), and airflow.

3. (original) A method as claimed in claim 1 wherein said at least one physiological acid-base parameter is selected from a group consisting of CO<sub>2</sub> content and pH.

4. (original) A method as claimed in claim 2 wherein said at least one respiratory parameter is end-tidal carbon dioxide (EtCO<sub>2</sub>).

5. (original) A method as claimed in claim 2 wherein said at least one respiratory parameter is respiratory frequency (RF).

6. (original) A method as claimed in claim 1 wherein monitoring is performed by a capnograph.

7. (currently amended) A method for adjusting the central nervous system affecting vagal nerve stimulation (VNS) signal induced by a stimulus generator implanted in a patient in need of vagal nerve stimulation comprising the steps of

a) monitoring the level of end-tidal carbon dioxide (EtCO<sub>2</sub>) and respiration frequency which correlate to the VNS intensity, and

b) regulating the stimulation intensity in response to said respiratory parameter.

8. (currently amended) A method for controlling the effectiveness of a central nervous system affecting vagal nerve stimulation (VNS) induced by a stimulus generator implanted in a patient in need of vagal nerve stimulation comprising the steps of

a) monitoring at least one parameter selected from respiratory parameters and physiological acid-base parameters which correlate to the VNS intensity, and

b) regulating the stimulation intensity in response to said at least one parameter.

9. (original) A method as claimed in claim 8 wherein said at least one respiratory parameter is selected from a group consisting of end-tidal carbon dioxide (EtCO<sub>2</sub>), respiratory rate (RR), respiratory frequency (RF), respiration amplitude (RA), and airflow.

10. (original) A method as claimed in claim 8 wherein said at least one physiological acid-base parameter is selected from a group consisting of CO<sub>2</sub> content and pH.

11. (currently amended) A method as claimed in claim 9 wherein said at least one respiratory parameter is end-tidal carbon dioxide (EtCO<sub>2</sub>)[[,]].

12. (original) A method as claimed in claim 9 wherein said at least one respiratory parameter is respiratory frequency (RF).

13. (original) A method as claimed in claim 8 wherein monitoring is performed by a capnograph.